REMARKS

Claims 1 and 26 are amended herein to explicitly recite which of two wireless devices is authenticated to a wireless network. Claim 31 is amended to twice replace the term "nonprovisioned" with "non-provisioned," a self-evident grammatical correction that is not necessary for patentability and does not alter the scope of the claim in any manner. No new matter is added.

The Examiner rejected, *inter alia*, independent claims 1, 26, and 31 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,075,860 to Ketcham. "[A] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the claim limitations must appear in the single prior art reference "arranged as in the claim." *Brown v. 3M*, 265 F.3d 1349, 60 USPQ2d 1375 (Fed. Cir. 2001). Ketcham fails to disclose every element of claims 1, 26, or 31, arranged as in the claims.

Ketcham discloses authenticating a remote terminal 102 (Fig. 1) over a wireless link 114 by connecting the remote terminal 102 to a cell phone 110. The cell phone 110 is merely a communication channel for the remote terminal 102, and takes no part in the authentication process other than to pass data between the remote terminal 102 and the network 104. The remote terminal 102 performs all authentication processing (e.g., calculating a response to an authentication challenge received from the network 104 via the cell phone 110.

Claim 1

Claim 1 recites a first wireless device (*e.g.*, a laptop 18, see Fig. 1) authenticating to a first wireless network (*e.g.*, WLAN 20, via 802.11(b) link 21). The laptop 18 receives an authentication challenge from the first network 20, and passes it to a second wireless device

(*e.g.*, cell phone 12, which may connect to a second wireless network 14) that includes an authentication key (*e.g.*, in memory 27). The cell phone 12 calculates a response to the authentication challenge and forwards it to the laptop 18, which in turn forwards it to the network 20 <u>to authenticate the laptop 18</u>. Note that the device with the key, which calculates the authentication challenge response, is <u>not</u> the device being actually authenticated to the network.

Ketcham does not disclose this arrangement. Ketcham discloses receiving an authentication challenge at a first wireless device (cell phone 110), and forwarding it to a second device (remote terminal 102). The second device calculates a response (using an attached card reader 116), forwards it to the first device, and the first device forwards it to the network. However, it is the <u>second device</u> – the remote terminal 102 – that is authenticated. The first device – the cell phone 110 – is merely a communications channel. As amended, claim 1 explicitly recites that the <u>first wireless device</u> is authenticated to the first network. Ketcham discloses that the <u>second</u> device is authenticated. For at least the reason that Ketcham fails to disclose authenticating the second wireless device, the §102 rejection cannot stand.

<u>Claim 26</u>

Claim 26 is directed to a non-provisioned wireless device, *e.g.*, the laptop 18. The term "provisioned" is defined at p.6, lines 24-26, "The communication device 12 with a key programmed therein is referred to as a 'provisioned' device 12; and the wireless computing device 18 without a key is a 'non-provisioned' device." The "key" is defined in the preceding paragraph (p. 6, lines 9-20) as an authentication key. Claim 26 is thus directed to a wireless device without a key, that forwards an authentication challenge to a wireless device that has a key (a provisioned wireless device), receives an authentication response from the provisioned device, and forwards the response to the wireless network <u>to authenticate the **non-provisioned** device to the network</u>.

In Ketcham, the cell phone 110 is a non-provisioned device; the remote terminal 102 is a provisioned device. Ketcham discloses that the non-provisioned device 110 receives an

authentication challenge from a network 104 and forwards it to a provisioned device 102. The provisioned device 102 calculates and authentication response, sends the response to the non-provisioned device 110, which then forwards it to the network 104 to authenticate the **provisioned** device – not the non-provisioined device, as recited in claim 26 – to the network 104. For at least the reason that Ketcham fails to disclose authentication for a non-provisioned device, the §102 rejection must be withdrawn.

<u>Claim 31</u>

Claim 31 is directed to a wireless device having an authentication key, *e.g.*, the cell phone 18. That is, claim 31 is directed to a provisioned device. An authentication unit in the device receives an authentication challenge from a "non-provisioned wireless device attempting to access the wireless network." By the plain language of claim 31, it is the non-provisioned device that is attempting to access the network. The authentication unit calculates an authentication response, and "forward[s] the authentication response via the interface to the non-provisioned wireless device to be used by the **non-provisioned** wireless device to access the wireless network." Again, by the plain language of claim 31, it is the non-provisioned device that gains access to the network via the authentication response.

Ketcham discloses precisely the opposite. In Ketcham, a non-provisioned cell phone 110 receives an authentication challenge from a network 104 and forwards it to a provisioned remote terminal 102. The provisioned device 102 calculates an authentication response and sends the response to the non-provisioned device 110, which then forwards it to the network 104 to authenticate the **provisioned** device – not the non-provisioined device, as recited in claim 26 – to the network 104. For at least the reason that Ketcham fails to disclose authentication for a non-provisioned device, the §102 rejection is improper.

<u>Conclusion</u>

Independent claims 1, 26, and 31 define patentable novelty over Ketcham. As all dependent claims include the limitation of their parent claim(s), the dependent claims are novel

11

as well. The combination of Ketcham with Eberhard or Ternullo do not teach or suggest a

provisioned device calculating a response to an authentication challenge to authenticate a non-

provisioned device to a network. Accordingly, all pending claims are in condition for allowance,

and prompt allowance of all pending claims is hereby requested.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

Dated: August 16, 2005

Edward H. Green, III
Registration No.: 42,604

P.O. Box 5
Raleigh, NC 27602
Telephone: (919) 854-1844
Facsimile: (919) 854-2084